



High School Culinary Challenge



Northern Alberta Institute of Technology
March 12, 2022



High School Culinary Challenge

Location: NAIT Culinary Kitchens
South kitchen labs beside the Common Market

Date: March 12, 2022

Start Time: 6:30 am arrival (group A)
11:30 am arrival (group B)

Duration: 7:00 - 11:00 am (group A)
12:00 - 4:00 pm (group B)

Purpose of Challenge:

To promote professionalism, team building and the pursuit of culinary excellence.

Overview:

Each three-member team of high school students, using provided recipes, will prepare four servings of a three-course meal (soup, entrée, and dessert) to an advanced level of the CTS Foods Program. Two portions of each course are to be plated and presented to judges - one portion is for tasting; one portion is for presentation. The remaining two portions are reserved. All food is to be presented on provided plates. Competitors are free to consult reference books of their choice.

Kitchen stations will be drawn and assigned by competition organizers. Food items listed as par stock will be made available to all participants and held in a common area. Judges reserve the quantities. Carefully note the presentation times for all courses.

All competitors are responsible for the complete cleanup of their work areas, stoves, sinks, floors, and surrounding areas before leaving the competition site. Points will be deducted for competitors who do not comply.

Competition Menu

Cream of Mushroom Soup
Pan fried Chicken Supreme, Duchesse Potatoes, Bouquetiere of Vegetables and
Pan Gravy
Chocolate Cake, Raspberry Coulis, Caramel Sauce and Chantilly Cream

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PRESENTATION TIMES:

General times are provided and are subject to change to meet competition logistics.

<i>Appetizer:</i>	10:00 - 10:05 am	(group A)
	3:00 - 3:05 pm	(group B)
<i>Main Course:</i>	10:30 - 10:35 am	(group A)
	3:30 - 3:35 pm	(group B)
<i>Dessert:</i>	11:00 - 11:05 am	(group A)
	4:00 - 4:05 pm	(group B)

Labs are to be completely cleaned or marks will be deducted.

CLOTHING REQUIREMENTS:

Competitors will be professionally attired in a white chef jacket, checked or black pants, apron, and hairnet as required. Chef hats will be provided and must be worn by all competitors. Appropriate kitchen shoes (closed toes, non-skid soles, and leather-style surface) ***No athletic or running shoes are allowed.***

EQUIPMENT AND MATERIALS:

French knife, paring knife, vegetable peeler, French whip, wooden spoon, food containers, meat mallet, piping bag, tips, measuring spoons, hand mixer, toolbox, and any other small tools required. NAIT will provide the pots, pans, and bowls. ***Competitors must bring their own small tools and knife kits.***

COOKING TERMINOLOGY:

- Batonnet – 1/4 inch by 1/4 inch by 3 inches (6mm x 6mm x 76mm)
- Small dice – 1/4 inch by 1/4 inch by 1/4 inch (6mm x 6mm x 6mm)
- Medium dice – 1/2 inch by 1/2 inch by 1/2 inch (12mm x 12mm x 12mm)
- Reduce – to cook down to desired consistency
- t – teaspoon – 5 ml
- T – tablespoon – 15 ml

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(a) Tourné: 2 in. long \times $\frac{3}{4}$ in. diameter, with 7 sides, and flat-ended (5 cm \times 2 cm).



(b) Large dice: $\frac{3}{4}$ in. \times $\frac{3}{4}$ in. \times $\frac{3}{4}$ in. (2 cm \times 2 cm \times 2 cm).



(c) Medium dice: $\frac{1}{2}$ in. \times $\frac{1}{2}$ in. \times $\frac{1}{2}$ in. (12 mm \times 12 mm \times 12 mm).



(d) Small dice: $\frac{1}{4}$ in. \times $\frac{1}{4}$ in. \times $\frac{1}{4}$ in. (6 mm \times 6 mm \times 6 mm).



(e) Brunoise (broon-wahz): $\frac{1}{8}$ in. \times $\frac{1}{8}$ in. \times $\frac{1}{8}$ in. (3 mm \times 3 mm \times 3 mm).



(f) Fine brunoise: $\frac{1}{16}$ in. \times $\frac{1}{16}$ in. \times $\frac{1}{16}$ in. (1.5 mm \times 1.5 mm \times 1.5 mm).



(g) Rondelle: round or bias-rond cuts, varied diameter or thickness.



(h) Paysanne: $\frac{1}{2}$ in. \times $\frac{1}{2}$ in. \times $\frac{1}{8}$ in. (12 mm \times 12 mm \times 3 mm; round, square, or rectangular).



(i) Lozenge: $\frac{1}{2}$ in. \times $\frac{1}{2}$ in. \times $\frac{1}{8}$ in. (12 mm \times 12 mm \times 3 mm; diamond-shape).



(j) Fermière: irregular shape, varied diameter or thickness.



(k) Batonnet: $\frac{1}{4}$ in. \times $\frac{1}{4}$ in. \times 2 $\frac{1}{2}$ -3 in. (6 mm \times 6 mm \times 6-7.5 cm).



(l) Julienne (or allumette potatoes): $\frac{1}{8}$ in. \times $\frac{1}{8}$ in. \times 2 $\frac{1}{2}$ in. (3 mm \times 3 mm \times 6 cm).



(m) Fine julienne: 2 in. long \times $\frac{1}{16}$ in. \times $\frac{1}{16}$ in. (1.5 mm \times 1.5 mm \times 5 cm).

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SAFETY REQUIREMENTS:

- Oven mitts, white terry cloth or t-towel
- Non-slip leather-style shoes
- No rings, watches, or personal jewelry
- Loose hair completely restrained
- Competitors are required to observe all safety standards during the competition.

RELATED CAREER AND TECHNOLOGY STUDY MODULES:

- Module FOD 1020 Baking Basics
- Module FOD 2070 Stocks, Soups and Sauces
- Module FOD 2080 Vegetables Fruits and Grains
- Module FOD 2090 Creative Cold Foods
- Module FOD 2100 Basic Meat Cookery
- Module FOD 2110 Fish
- Module FOD 2150 Food Safety & Sanitation
- Module FOD 3050 Advanced Soups and Sauces
- Module FOD 3060 Food Presentation
- Module FOD 3080 Advanced Meat Cookery

JUDGING CRITERIA:

Includes:

- adherence to safety and sanitation rules as contained in the sanitation code
- interpretation skills of scope documents and provided recipes
- general cooking skills, work habits, cooking techniques, development of flavors, degrees of doneness, texture, temperature controls, presentation skills and effective utilization of food products
- cooperation with others in kitchen, effective team participation

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MARKING CRITERIA:

15% Sanitation	Professional attire, hats, aprons, shoes Personal hygiene, hair restrained Cutting board and utensil sanitation Correct food handling and storage Cleanup - entire work area and adjacent areas/sinks and stoves cleaned and sanitized (5-mark penalty if incomplete) other _____
5% Timing	All products presented at noted time 5-minute period of grace – any later results in zero
5% Temperature	Hot food served hot on heated plates Cold foods served cold on chilled plates
25% Organization	Follows worksheet, follows timetable Professional use of knives, tools and equipment Station maintained neat, clean and orderly Demonstrates safe working practices Effective food utilization / wastage Accuracy of knife skills Correct cooking methods Team work other _____
15% Presentation	Portion size / balance Effective color / contrast Clean plates, neatness Technical skills (slicing, dicing, turning etc.) other _____
35% Taste	Correct textures of food, consistency of sauces Degree of doneness, not over/undercooked Balanced taste and seasonings – enhanced natural flavors Not bland, under/over seasoned Not excessively salty, sour, sweet or bitter Not burnt, metallic tasting or aftertaste

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RECIPES

Students a **MUST ADHERE** to specified portions and ingredients to ensure consistent results and equitable judging.

Cream of Mushroom Soup

Recipe Yield – 1.5 L

Ingredients

White mirepoix:

Onion	50g
Leek	50g
Celery	25 g
Butter	65 g
Flour, all-purpose	65 g
Chicken stock	1.25 L
Mushrooms, stems removed and retained	250 g
Sachet (Bay leaf, fresh thyme, peppercorns)	1 each
Cream, 35%	100 mL
Salt and pepper	TT

Procedure

1. Sweat mirepoix in butter with mushroom stems. Do not brown.
2. Remove from heat, add flour, and return to moderate heat. Cook for 1 minute, stirring continuously. Remove from heat again.
3. Stir in chicken stock in 3 stages, bring to a boil and reduce to a simmer.
4. Add sachet and cook 30 – 45 minutes.
5. Strain the soup into a clean pot and bring back to a boil.
6. Add sliced mushroom caps and return to a simmer for 10 minutes.
7. Add cream and adjust seasoning
8. Adjust consistency (thickness) of finished soup if necessary.

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Pan-Fried Chicken with Pan Gravy

Recipe Yield – 4

Ingredients

Chicken breasts – Frenched, skin removed	4
Salt and pepper	TT
Garlic powder	10 g
Onion powder	6 g
Dried oregano	1 g
Dried basil	1 g
Flour	250 g
Buttermilk	250 mL
Oil	as needed
Flour	50g
Onion, small dice	125 g
Chicken stock	750 mL

Procedure

1. Season the chicken with salt and pepper.
2. Add the herbs and spices to 250 g of the flour.
3. Dip the chicken in the buttermilk.
4. Dredge the chicken in the seasoned flour.
5. Pan-fry the chicken in 1 cm of oil turning so it cooks evenly. Remove the chicken when well browned. Transfer to an oven safe dish and finish cooking in the oven.
6. To make the gravy, pour off all but 50 mL of oil from the pan, carefully reserving the fond.
7. Add the diced onions and sauté until translucent.
8. Add 50 g of flour and cook to make a blonde roux.
9. Whisk in the stock and simmer approximately 15 minutes.
10. Strain through a cheese cloth and adjust the seasonings.
11. Serve one frenched chicken breast per person with the gravy.

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Duchesse Potatoes

Recipe Yield – 6

Ingredients

Potatoes, Russet	750g
Butter, melted	50g
Egg Yolks,	2
Salt & Pepper	TT
Nutmeg	TT

Procedure

1. Simmer the potatoes in water until tender. Drain and transfer to a lined baking sheet and let dry in an oven several minutes.
2. Pass the potatoes through a food mill or ricer.
3. Add butter and mix to a smooth paste. Season to taste with salt, pepper, and just a little nutmeg (the potatoes should not taste strongly of nutmeg).
4. If the potatoes are very moist, stir over a low flame to stiffen. They must be much stiffer than mashed potatoes.
5. Add the egg yolks (off the heat) and beat until smooth.
6. Put the mixture in a pastry bag with a star tip and pipe out into cone shaped spiral mounds.
7. Brush lightly with egg wash.
8. Place potatoes in hot oven (400° - 425°F) until lightly browned.



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Bouquetiere of Vegetables

Recipe Yield – 4 portions

Ingredients

Cauliflower florets	12 each or as desired
Green beans	12 each or as desired
Carrot Batonnet	12 each or as desired
Butter	as needed
Salt and pepper	TT

Procedure

1. Wash, peel, trim and cut the vegetables into uniform shapes and sizes.
2. Bring an adequate amount of water to a boil. The liquid should cover the vegetables and they should be able to move freely without overcrowding.
3. Add the vegetables to the boiling liquid. If more than one vegetable is to be cooked and they have different cooking times, they should be cooked separately to ensure that all are cooked to the proper doneness. The pot may be covered if cooking white, red or yellow vegetables. Do not cover the pot when boiling green vegetables. When cooking vegetables of different colors always work from lightest colour to darkest colour.
4. Cook the vegetables to the desired doneness.
5. Remove the vegetables from the boiling water with a slotted spoon, a spider, or drain through a colander.
6. Refresh / shock the vegetables in ice water, drain and refrigerate until needed.
7. Finish the vegetables as desired for service.

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Basic Sponge Cake

Recipe Yield – 1 10”Cake

Ingredients

Large Eggs	2
Butter, unsalted - Room Temperature	113g
Sugar	350g
A.P. flour	310g
Cocoa powder	40g
Sour Cream	120g
Baking soda	12g
Hot water	250g
Salt	1g
Vanilla	1g

Procedure

1. Cream butter and sugar in mixer with paddle.
2. Add eggs and continue to beat. Scrape mixer down well.
3. Add in sour cream and salt. Continue to mix until well incorporated.
4. Add in dry ingredients and water alternately and mix until just combined.
5. Bake at 350°F for 40 - 45 minutes or until a toothpick inserted in the middle comes out clean.

Raspberry Coulis

Recipe Yield – 4 portions

Ingredients

Raspberries	200g
Sugar	100g
Water	40g
Lemon Juice	15g

Method

1. Puree the fruit in a blender or food processor. Pass through a fine sieve or chinois.
2. Warm the fruit puree in a saucepan.
3. Separately, make a syrup of the sugar and water and boil to 220°F. Mix into fruit puree.
4. Return to a boil, strain, and mix in the juice.

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Chantilly Cream

Recipe Yield – 4 portions

Ingredients

Whipping cream, cold	250 ml
Icing sugar	30 ml
Vanilla	3 ml

Method

1. Add all the ingredients in a metal or china bowl.
2. Beat until thick and fluffy, taking care not to over beat.

Caramel Sauce

Recipe Yield – 4 portions

Ingredients

Whipping cream	160 ml
Sugar	160 ml
Water	30 ml
Honey	5 ml
Butter, unsalted, softened	30 ml
Vanilla extract	3 ml

Method

1. Bring the cream to a boil in a small saucepan over medium heat.
2. Cook the sugar, water, and honey in a small heavy-duty saucepan over high heat until the mixture comes to a boil. Brush around the inside of the pan with a damp pastry brush at the point where the sugar syrup meets the sides of the pan. Do this twice during the cooking process to prevent the sugar from crystallizing.
3. Cook the mixture over high heat, without stirring, until it turns amber-colored, 6 - 8 minutes.
4. Lower the heat to medium and slowly add the hot cream to the sugar mixture while stirring constantly. The cream will bubble and foam. Continue stirring to make sure there are no lumps.
5. Remove the saucepan from the heat and stir in the butter until it is completely melted. Stir in the vanilla.
6. Transfer the caramel sauce to a bowl, cover tightly with plastic wrap, cool slightly, and serve warm.

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Notes

1. Cake portion is not to exceed 3" x 3" approx.
2. Raspberry sauce portion is approximately 45 ml.
3. Chantilly cream should be piped decoratively.
4. Caramel sauce is to be applied from a plastic bottle with tip or piping bag.
5. You may use additional garnish as desired.